

## CLAIMS

What is claimed is:

1. A document generation system comprising:  
an assembly facility configured to be coupled to an origination platform;  
5 a knowledge base configured to be coupled to the assembly facility and to store  
objects in an object-relational hierarchy; and  
a content management system configured to be coupled to the knowledge base and  
to support authoring of content and rules.
2. A document generation system as claimed in claim 1, wherein the assembly facility  
10 is configured to validate data received from the origination platform.
3. A document generation system as claimed in claim 1, wherein the assembly facility  
is configured to apply a precedence process.
4. A document generation system as claimed in claim 1, wherein the assembly facility  
is configured to apply rules to supplied transaction data to select, modify, or generate  
15 content.
5. A document generation system as claimed in claim 1, wherein the assembly facility  
is configured to validate data received from the origination platform, to apply a precedence  
process, and to apply rules to supplied transaction data to select, modify, or generate  
content.
- 20 6. A document generation system as claimed in claim 5, wherein the assembly facility  
is configured to generate a resolved, markup language file.
7. A document generation system as claimed in claim 6, wherein the resolved,  
markup language file is an XML file to which a style sheet may be applied to generate a  
file in an output format.
- 25 8. A document generation system as claimed in claim 1, wherein the assembly facility  
is configured to operate with an interface to receive information from the origination  
platform.
9. A document generation system as claimed in claim 8, wherein the interface is an  
application programming interface.
- 30 10. A document generation system as claimed in claim 1, wherein the knowledge base  
is configured to be loaded by press process.

11. A document generation system as claimed in claim 1, wherein the knowledge base includes a plurality of stored procedures.

12. A document generation system as claimed in claim 1, wherein the knowledge base is configured to be loaded by press process and includes a plurality of stored procedures.

5 13. A document generation system as claimed in claim 1, wherein the knowledge base includes a plurality of object stores.

14. A document generation system as claimed in claim 13, wherein each object store corresponds to an architecture specified by a schema or a document type definition.

10 15. A document generation system as claimed in claim 13, wherein the knowledge base includes a rules object store and a content object store.

16. A document generation system as claimed in claim 1, wherein each object store is configured to be able to contain a link to an object.

15 17. A document generation system as claimed in claim 16, wherein each object store is configured to be able to contain a link to an object selected from the group of an external object, a binary object, or a character object.

18. A document generation system as claimed in claim 17, wherein each binary and character object is composed of XML text fragments.

19. A computer readable medium containing instructions for generating a document by acquiring data from an origination platform;  
20 interacting with a knowledge base and applying precedence and rules to create a first set of documents;  
modifying the first set of documents based on user input;  
validating data acquired from the origination platform; and  
interacting with a knowledge base and applying precedence and rules to create a  
25 second set of documents.

20. A computer readable medium as claimed in claim 19, further comprising instructions for transforming each of the documents in the second set of documents into an XML file.

30 21. A computer readable medium as claimed in claim 20, further comprising instructions for applying style sheets to the XML file.

22. A computer readable medium as claimed in claim 21, further comprising instructions for converting the XML file to a second file having a format other than an XML format.

23. A computer readable medium as claimed in claim 19, further comprising  
5 instructions for generating a document from the first set of documents that is a layout document.

24. A computer readable medium as claimed in claim 19, further comprising instructions for validating data received from the origination platform.

25. A computer readable medium as claimed in claim 19, further comprising  
10 instructions for performing a press process.

26. A computer readable medium as claimed in claim 19, further comprising instructions for a plurality of stored procedures.

27. A method of assembling computer-processable components into computer-processable end products, the method comprising:

15 interacting with a knowledge base to create a first set of end products, each end product containing an object;  
applying precedence to the first set of end products;  
extracting rules from the knowledge base; and  
assembling a second set of end products based upon applying precedence and rules.

20 28. A method as claimed in claim 27, further comprising acquiring data from an origination platform.

29. A method as claimed in claim 27, further comprising validating data acquired from the origination platform.

30. A method as claimed in claim 27, further comprising modifying one or more end  
25 products in the first set of end products based on user input.

31. A method as claimed in claim 27, further comprising assigning a name to each object.

32. A method as claimed in claim 31, wherein applying precedence to the first set of end products includes associating each object with a parent having a name.

30 33. A method as claimed in claim 32, wherein applying precedence to the first set of end products includes assigning at least one object to a precedence level while retaining an association to the name of the object's parent.

34. A computer readable medium containing instructions for generating a document by interacting with a knowledge base to create a first set of documents; applying precedence to the first set of documents; extracting rules from the knowledge base; and  
5 assembling a second set of documents based upon applying precedence and rules.
35. A set of computer-processable end products assembled by a method, the method comprising:  
interacting with a knowledge base to create a first set of computer-processable end products;  
10 applying precedence to the first set of computer-processable end products; applying rules to the first set of computer-processable end products; and assembling the set of computer-processable end products based upon applying precedence and rules.
36. The set of computer-processable end products as claimed in claim 35, further comprising acquiring data from an origination platform.  
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37. The set of computer-processable end products as claimed in claim 35, further comprising validating the acquired data from the origination platform.
38. The set of computer-processable end products as claimed in claim 35, further comprising modifying the first set of end products based on user input.
- 20 39. A set of documents generated by a method, the method comprising:  
interacting with a knowledge base to create a first set of documents;  
applying precedence to the first set of documents;  
applying rules to the first set of documents; and  
assembling the set of document based upon applying precedence and rules.
- 25 40. The document as claimed in claim 39 wherein the method further comprises acquiring data from an origination platform.
41. The document as claimed in claim 39 wherein the method further comprises validating the acquired data from the origination platform.
42. The document as claimed in claim 39 wherein the method further comprises  
30 modifying the first set of documents based on user input.
43. A method for generating documents, the method comprising:  
acquiring data from an origination platform;

interacting with a knowledge base to create a first set of documents;

applying precedence to the first set of documents based on the acquired data;

applying rules to the first set of documents based on the acquired data; and

5 assembling a second set of documents based upon applying precedence and rules.

44. The method as claimed in claim 43, further comprising validating the acquired data from the origination platform.

10 45. The method as claimed in claim 43, further comprising modifying the first set of documents based on user input.